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<213> Homo sapiens

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                                                                      1860
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<213> Homo sapiens
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                                                                       1620
ggettgeaag nacattteec ecetttgeag tgngaataen aaggeegaeg ategeettte
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<210> 45

<211> 121

<212> PRT

<213> Homo sapiens

<400> 45

Met Ala Ser Cys Leu Ala Leu Arg. Met Ala Leu Leu Leu Val Ser Gly
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Val Leu Ala Pro Ala Val Leu Thr Asp Asp Val Pro Gln Glu Pro Val

Pro Thr Leu Trp Asn Glu Pro Ala Glu Leu Pro Ser Gly Glu Gly Pro
35 40 45

Val Glu Ser Thr Ser Pro Gly Arg Glu Pro Val Asp Thr Gly Pro Pro 50 55 60

Ala Pro Thr Val Ala Pro Gly Pro Glu Asp Ser Thr Ala Gln Glu Arg 65 70 75 80

Leu Asp Gln Gly Gly Ser Leu Gly Pro Gly Ala Ile Ala Ala Ile 85 90 95

Val Ile Ala Ala Leu Leu Ala Thr Cys Val Val Leu Ala Leu Val Val
100 105 110

Val Ala Leu Arg Lys Phe Ser Ala Ser

<210> 46

<211> 64

<212> PRT

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<213> Homo sapiens

<400> 46
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Met Phe Met Trp Thr Ile Ser Ile Val Thr Phe Ser Ile Pro Leu Thr 1 5 10 15

Leu Pro Leu Pro Leu Arg Gly Glu Asn Lys Thr Leu Asn Gly Ser Asn 20 25 30

Ser Tyr Val Phe Tyr Phe Val Ser Glu Val Ser Lys Leu Leu Leu Leu 35 40 45

Ala Ser Phe Ser Leu Gly Gln Met Asp Val Ser Tyr Phe Pro Val Ser 50 55 60

<210> 47
<211> 40
<212> PRT

<213> Homo sapiens

<400> 47

Met Phe Val Phe Ser Leu Leu His Phe Gly Val Leu Leu Leu Gln Cys
1 5 10 15

Asp Pro Cys Trp Ala Phe Leu Tyr Asn Gln Gln Leu Asn Leu Leu Pro 20 25 30

Asn Ala Cys Leu Pro Phe Ile Phe 3.5 40

<210> 48 <211> 340

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (334)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (335)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 48

Met Pro Gly Trp Leu Thr Leu Pro Thr Leu Cys Arg Phe Leu Leu Trp 1 5 10 15

Ala Phe Thr Ile Phe His Lys Ala Gln Gly Asp Pro Ala Ser His Pro 20 25 30

- Gly Pro His Tyr Leu Leu Pro Pro Ile His Glu Val Ile His Ser His
  .35 40 45
- Arg Gly Ala Thr Ala Thr Leu Pro Cys Val Leu Gly Thr Thr Pro Pro 50 ... 55 60
- Ser Tyr Lys Val Arg Trp Ser Lys Val Glu Pro Gly Glu Leu Arg Glu 65 70 75 80
- Thr Leu Ile Leu Ile Thr Asn Gly Leu His Ala Arg Gly Tyr Gly Pro 85 90 95
- Leu Gly Gly Arg Ala Arg Met Arg Arg Gly His Arg Leu Asp Ala Ser 100 105 110
- Leu Val Ile Ala Gly Val Arg Leu Glu Asp Glu Gly Arg Tyr Arg Cys
  115 120 125
- Glu Leu Ile Asn Gly Ile Glu Asp Glu Ser Val Ala Leu Thr Leu Ser 130 135 140
- Leu Glu Gly Val Val Phe Pro Tyr Gln Pro Ser Arg Gly Arg Tyr Gln 145 150 150 160
- Phe Asn Tyr Tyr Glu Ala Lys Gln Ala Cys Glu Glu Gln Asp Gly Arg 165 170 175
- Leu Ala Thr Tyr Ser Gln Leu Tyr Gln Ala Trp Thr Glu Gly Leu Asp 180 185 190
- Trp Cys Asn Ala Gly Trp Leu Leu Glu Gly Ser Val Arg Tyr Pro Val 195 200 205
- Leu Thr Ala Arg Ala Pro Cys Gly Gly Arg Gly Arg Pro Gly Ile Arg 210 215 220
- Ser Tyr Gly Pro Arg Asp Arg Met Arg Asp Arg Tyr Asp Ala Phe Cys 235 230 235
- Phe Thr Ser Ala Leu Ala Gly Gln Val Phe Phe Val Pro Gly Arg Leu 245 250 250 . 255
- Thr Leu Ser Glu Ala His Ala Ala Cys Arg Arg Arg Gly Ala Val Val 260 265 270
- Ala Lys Val Gly His Leu Tyr Ala Ala Trp Lys Phe Ser Gly Leu Asp 275 280 285
- Gln Cys Asp Gly Gly Trp Leu Ala Asp Gly Ser Val Arg Phe Pro Ile 290 295 300
- Thr Thr Pro Arg Pro Arg Cys Gly Gly Leu Pro Asp Pro Gly Val Arg 305 310 315 320
- Ser Phe Gly Phe Pro Arg Pro Gln Gln Ala Ala Tyr Gly Xaa Xaa Cys 325 330 335

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Tyr Ala Glu Asn
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<210> 49

<211> 43

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 49

Met Asp Val Pro Gly Met Thr Ser Phe Leu Leu Gly Gly Trp Arg

Ala Leu Val Leu Gly Leu Ser Ala Glu Phe Gln Gly Ser Leu Thr Cys

Pro Cys Pro Ser Phe Pro Xaa Trp Ala Pro Ser 40 .

<210> 50

<211> 421

<212> PRT

<213> Homo sapiens

<400> 50

Met Thr Val Phe Phe Lys Thr Leu Arg Asn His Trp Lys Lys Thr Thr 10

Ala Gly Leu Cys Leu Leu Thr Trp Gly Gly His Trp Leu Tyr Gly Lys 25 20

His Cys Asp Asn Leu Leu Arg Arg Ala Ala Cys Gln Glu Ala Gln Val 40

Phe Gly Asn Gln Leu Ile Pro Pro Asn Ala Gln Val Lys Lys Ala Thr 50

Val Phe Ser Ile Leu Gln Leu Ala Lys Glu Lys Pro Gly Leu Tyr Leu

Lys Lys Met Leu Pro Asp Phe Thr Phe Ile Trp His Gly Cys Asp Tyr 85

Cys Lys Thr Asp Tyr Glu Gly Gln Ala Lys Lys Leu Leu Glu Leu Met 105

Glu Asn Thr Asp Val Ile Ile Val Ala Gly Gly Asp Gly Thr Leu Gln 120

Glu Val Val Thr Gly Val Leu Arg Arg Thr Asp Glu Ala Thr Phe Ser 140 135 130

Lys	Ile	Pro	Ile	Gly	Phe	Ile	Pro	Leu	Gly	Glu	Thr	Ser	Ser	Leu	Ser
145					150					155					160

- His Thr Leu Phe Ala Glu Ser Gly Asn Lys Val Gln His Ile Thr Asp 165 170 175
- Ala Thr Leu Ala Ile Val Lys Gly Glu Thr Val Pro Leu Asp Val Leu 180 185 . 190
- Gin Ile Lys Gly Glu Lys Glu Gln Pro Val Phe Ala Met Thr Gly Leu 195 200 205
- Arg Trp Gly Ser Phe Arg Asp Ala Gly Val Lys Val Ser Lys Tyr Trp 210 220
- Tyr Leu Gly Pro Leu Lys Ile Lys Ala Ala His Phe Phe Ser Thr Leu 225 230 235 240
- Lys Glu Trp Pro Gln Thr His Gln Ala Ser Ile Ser Tyr Thr Gly Pro 245 250 255
- Thr Glu Arg Pro Pro Asn Glu Pro Glu Glu Thr Pro Val Gln Arg Pro 260 265 270
- Ser Leu Tyr Arg Arg Ile Leu Arg Arg Leu Ala Ser Tyr Trp Ala Gln 275 280 285
- Pro Gln Asp Ala Leu Ser Gln Glu Val Ser Pro Glu Val Trp Lys Asp 290 295 300
- Val Gln Leu Ser Thr Ile Glu Leu Ser Ile Thr Thr Arg Asn Asn Gln 305 310 315 320
- Leu Asp Pro Thr Ser Lys Glu Asp Phe Leu Asn Ile Cys Ile Glu Pro 325 330 335
- Asp Thr Ile Ser Lys Gly Asp Phe Ile Thr Ile Gly Ser Arg Lys Val 340 345 350
- Arg Asn Pro Lys Leu His Val Glu Gly Thr Glu Cys Leu Gln Ala Ser 355 360 365
- Gln Cys Thr Leu Leu Ile Pro Glu Gly Ala Gly Gly Ser Phe Ser Ile 370 375 380
- Asp Ser Glu Glu Tyr Glu Ala Met Pro Val Glu Val Lys Leu Leu Pro 385 390 395 400
- Arg Lys Leu Gln Phe Phe Cys Asp Pro Arg Lys Arg Glu Gln Met Leu 405 410 415

Thr Ser Pro Thr Gln 420

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<211> 641
<212> PRT
<213> Homo sapiens
<220>
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<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids
<221> SITE
<222> (469)
<223> Xaa equals any of the naturally occurring L-amino acids
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Cys Leu Leu Cys Ser Ser Cys Leu Gly Ser Pro Ser Pro Ser Thr Gly
Pro Glu Lys Lys Ala Gly Ser Gln Gly Leu Arg Phe Arg Leu Ala Gly
Phe Pro Arg Lys Pro Tyr Glu Gly Arg Val Glu Ile Gln Arg Ala Gly
Glu Trp Gly Thr Ile Cys Asp Asp Phe Thr Leu Gln Ala Ala His
Ile Leu Cys Arg Glu Leu Gly Phe Thr Glu Ala Thr Xaa Trp Thr His
Ser Ala Lys Tyr Gly Pro Gly Thr Gly Arg Ile Trp Leu Asp Asn Leu
Ser Cys Ser Gly Thr Glu Gln Ser Val Thr Glu Cys Ala Ser Arg Gly
                           120
Trp Gly Asn Ser Asp Cys Thr His Asp Glu Asp Ala Gly Val Ile Cys
    130
                        135
                                            140
Lys Asp Gln Arg Leu Pro Gly Phe Ser Asp Ser Asn Val Ile Glu Val
                   150.
                                        155
Glu His His Leu Gln Val Glu Val Arg Ile Arg Pro Ala Val Gly
                165 -
                                    170
Trp Gly Arg Arg Pro Leu Pro Val Thr Glu Gly Leu Val Glu Val Arg
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Leu Pro Asp Gly Trp Ser Gln Val Cys Asp Lys Gly Trp Ser Ala His

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Asn	Ser 210	His	Val	Val	Cys	Gly 215	Met	Leu	Gly	Phe	Pro 220	Ser	Glu	Lys	Arg
Val 225	Asn	Ala	Ala	Phe	Tyr 230	Arg	Leu	Leu	Ala	Gln 235	Arg	Gln	Gln	His	Ser 240
Phe	Gly	Leu	His	Gly 245	Val	Ala	Cys	Val	Gly 250	Thr	Glu	Ala	His	Leu 255	
Leu	Cys	Ser	Leu 260	Glu	Phe	Tyr	Arg	Ala 265	Asn	Asp	Thr	Ala	Arg 270	Cys	Pro
Gly	Gly	Gly 275	Pro	Ala	Val	Val	Ser 280	Cys	Val	Pro	Gly	Pro 285	Val	Tyr	Ala
Ala	Ser 290	Ser	Ġly	Gln	Lys	Lys 295	Gln	Gln	Gln	Ser	Lys 300	Pro	Gln	Gly	Glu
Ala 305	Arg	Val	Arg	Leu	Lys 310	Gly	Gly	Ala	His	Pro 315	Gly	Glu	Gly	Arg	Val 320
Glu	Val	Leu	Lys	Ala 325	Ser	Thr	Trp	Gly	Thr 330	Val	Cys	Asp	Arg	Lys 335	Trp
Asp	Leu	His	Ala 340	Ala	Ser	Val	Val	Cys 345	Arg	Glu	Leu	Gly	Phe 350	Gly	Ser
Ala	Arg	Glu 355		Leu	Ser	Gly	Ala 360	Arg	Met	Gly	Gln	Gly 365	Met	Gly	Ala
Ile	His 370		Ser	Glu	Val	Arg 375	Cys	Ser	Gly	Gln	Glu 380	Leu	Ser	Leu	Trp
Lys 385		Pro	His	Lys	Asn 390	Ile	Thr	Ala	Glu	Asp 395		Ser	His	Ser	Gln 400
Asp	Ala	. Gly	Val	Arg 405		Asn	Leu	Pro	Tyr 410		Gly	Ala	Glu	Thr 415	Arg
Ile	Arg	Leu	Ser 420		Gly	Arg	Ser	Gln 425		Glu	Gly	Arg	Val 430		Val
Gln	Ile	Gly 435		Pro	Gly	Pro	Leu 440		Trp	Gly	Leu	Ile 445		Gly	Asp
Asp	450		/ Thr	· Leu	ı Glu	Ala 455		. Val	. Ala	Cys	Arg 460		. Leu	Gly	Leu
Gly 465		: Ala	a Asr	ı Xaa	470		Gln	Glu	Thr	475		Trp	Asp	Ser	Gly 480
Asr	ıle	Thi	Glu	val	L Xaa	Met	. Ser	Gly	/ Val	Arg	Cys	Thr	Gly	Thr	Glu

Leu Ser Leu Asp Gln Cys Ala His His Gly Thr His Ile Thr Cys Lys

			500					505				-	510		
Arg	Thr	Gly 515	Thr	Arg	Phe	Thr	Ala 520	Gly	Val	Ile	Cys	Ser 525	Glu	Thr	Ala
Ser	Asp 530	Leu	Leu	Leu	His	Ser 535	Ala	Leu	Val	Gln	Glu 540	Thr	Ala	Tyr	Ile
Glu 545	Asp	Arg	Pro	Leu	His 550	Met	Leu	Tyr	Cys	Ala 555	Ala	Glu	Glu	Asn	Суs 560
Leu	Ala	Ser	Ser	Ala 565	Arg	Ser	Ala	Asn	Trp 570	Pro	Tyr	Gly	His	Arg 5,75	Arg
Leu	Leu	Arg	Phe 580	Ser	Ser	Gln	Ile	His 585	Asn	Leu	Gly	Arg	Ala 590	Asp	Phe
Arg	Pro	Lys 595	Ala	Gly	Arg	His	Ser 600	Trp	Val	Trp	His	Glu 605	Cys	His	Gly
His	Tyr 610	His	Ser	Met	Asp	Ile 615	Phe	Thr	His	Tyr	Asp 620	Ile	Leu	Thr	Pro
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Thr															
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Val Ile Ala Val Leu Val Leu Val Ala Leu Leu Ile Ala Arg Thr 115 120 125

Pro Leu Pro Asp Leu Arg Ala Gln Glu Gln Ala Leu Gln Pro Thr Ala 130 135 140

Gly Lys Gly Leu Trp Gln His Arg Glu Phe Val Gly Gly Val Ile Thr 145 150 155 160

Gln Phe Phe Tyr Val Ala Ala Gln Val Gly Val Gly Ala Phe Phe Ile 165 170 . 175

Asn Tyr Val Thr Glu His Trp Ala Gln Met Gly Asn Gln Gln Ala Ala 180 185 190

Tyr Leu Leu Ser Ile Ala Met Leu Ala Phe Met Phe Gly Arg Phe Phe 195. 200 205

Ser Thr Trp Leu Met Gly Arg Val Ser Ala Gln Lys Leu Leu Leu Ile 210 220

Tyr Ala Leu Ile Asn Ile Ala Leu Cys Gly Leu Val Val Ile Gly Leu 225 230 235 240

Glu Gly Ile Ser Val Ile Ala Leu Ile Ala Val Phe Phe Met Ser 245 250 . 255

Ile Met Phe Pro Thr Leu Phe Ala Met Gly Val Lys Asn Leu Gly Pro 260 265 270

His Thr Lys Arg Gly Ser Ser Phe Met Ile Met Ala Ile Val Gly Gly 275 280 285

Ala Leu Met Pro Tyr Leu Met Gly Lys Val Ala Asp Asn Ser Thr Val 290 295 300

Ala Leu Ala Tyr Leu Leu Pro Met Gly Cys Phe Val Ile Val Ala Val 305 310 315 320

Tyr Ala Arg Ser Arg Leu Arg His Pro 325

<210> 53

<211> 40

<212> PRT

<213> Homo sapiens

<400> 53

Met Gly Ala Leu Met Arg Gly Ile Gln Phe Leu Phe Leu Cys Tyr Phe 1 5 10 15

Ser Ser Ser Cys Leu Pro Ser Glu Val Gln Asn Thr Tyr Pro Glu Val 20 25 30

Asn Leu Pro Phe Asn Trp Gly Pro

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<210> 54
<211> 74
<212> PRT
<213> Homo sapiens
<400> 54
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Ile Ser Asp Val Gln Tyr Phe Phe Thr Cys Leu Leu Val Ile Cys Ile
            20
                                25
Ser Ser Leu Glu Lys Tyr Leu Phe Asn Ser Phe Ala His Phe Lys Ile
Arg Leu Phe Gly Phe Leu Leu Met Leu Ser Cys Arg Ser Ser Leu
                         55
                                             60
Tyr Ile Leu Asp Ile His Pro Ser Tyr Ile
                    70
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<213> Homo sapiens
<400> 55
Met Pro Ala Ser Cys Pro Gly Pro Gly Gly Gly Asn Gln Gly Leu Leu
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Ser Arg Arg Thr Leu Lys Ala Glu Phe Cys Cys Pro Lys Gly Trp Thr
Ala Met Ile Pro Lys
<210> 56
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<212> PRT
<213> Homo sapiens
<400> 56
Met Leu Thr Ser His Gln Pro Thr Ser Leu Ile His Ile Leu Leu Val
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Ser Leu Phe Leu Ser Asn Pro Leu Cys Phe Gly Leu Leu Ser Val Cys

Pro Leu Gln Asn Ser Tyr Val Glu Ala Leu Thr Pro Asn Met Thr Leu 35 40 45

Phe Gly Asp Glu Ala Leu Ile Ile 50 55

<210> 57

<211> 332

<212> PRT

<213> Homo sapiens

<400> 57

Met Leu Pro Arg Leu Leu Leu Ile Cys Ala Pro Leu Cys Glu Pro 1 5 10 15

Ala Glu Leu Phe Leu Ile Ala Ser Pro Ser His Pro Thr Glu Gly Ser 20 25 30

Pro Val Thr Leu Thr Cys Lys Met Pro Phe Leu Gln Ser Ser Asp Ala 35 40 45

Gln Phe Gln Phe Cys Phe Phe Arg Asp Thr Arg Ala Leu Gly Pro Gly 50 55 60 .

Trp Ser Ser Pro Lys Leu Gln Ile Ala Ala Met Trp Lys Glu Asp 65 70 75 80

Thr Gly Ser Tyr Trp Cys Glu Ala Gln Thr Met Ala Ser Lys Val Leu 85 90 95

Arg Ser Arg Arg Ser Gln Ile Asn Val His Ile Pro Val Ser Arg Pro 100 105 110

Ile Leu Met Leu Arg Ala Pro Arg Ala Gln Ala Ala Val Glu Asp Val 115 120 125

Leu Glu Leu His Cys Glu Ala Leu Arg Gly Ser Pro Pro Ile Leu Tyr 130 140

Trp Phe Tyr His Glu Asp Ile Thr Leu Gly Ser Arg Ser Ala Pro Ser 145 150 155 160

Gly Gly Gly Ala Ser Phe Asn Leu Ser Leu Thr Glu Glu His Ser Gly
165 170 175

Asn Tyr Ser Cys Glu Ala Asn Asn Gly Leu Gly Ala Gln Arg Ser Glu 180 185 190

Ala Val Thr Leu Asn Phe Thr Val Pro Thr Gly Ala Arg Ser Asn His 195 200 205

Leu Thr Ser Gly Val Ile Glu Gly Leu Leu Ser Thr Leu Gly Pro Ala 210 215 220

Thr Val Ala Leu Leu Phe Cys Tyr Gly Leu Lys Arg Lys Ile Gly Arg 225 230 235 240

Arg Ser Ala Arg Asp Pro Leu Arg Ser Leu Pro Ala Leu Pro Gln Glu

245 250 255 Phe Thr Tyr Leu Asn Ser Pro Thr Pro Gly Gln Leu Gln Pro Ile Tyr 265 Glu Asn Val Asn Val Val Ser Gly Asp Glu Val Tyr Ser Leu Ala Tyr 280 Tyr Asn Gln Pro Glu Gln Glu Ser Val Ala Ala Glu Thr Leu Gly Thr 295 His Met Glu Asp Lys Val Ser Leu Asp Ile Tyr Ser Arg Leu Arg Lys 315 310 Ala Asn Ile Thr Asp Val Asp Tyr Glu Asp Ala Met 325 <210> 58 <211> 57 <212> PRT <213> Homo sapiens <400> 58 Met Thr Leu Ala Tyr Leu Leu Leu Phe Leu Cys Phe Val Ile Leu Ser 10 Pro Lys Pro Thr Met Asp Pro Met Leu Glu Arg Ala Lys Thr Ser Phe Ser Ser Cys Pro Arg Ser Gln. Val Met Leu Val Tyr His Leu Phe Leu Met Asp Phe Gln Cys Val Met Leu Cys 55 · <210> 59 <211> 100 <212> PRT <213> Homo sapiens <400> 59 Met Ser Pro Asn Leu Gly Leu Lys Trp Ile Ser Met Ile Leu Ile Thr 10 Tyr Trp Ala Leu Asn Leu Ala Pro Val Val Ala Ser Ile Asn Leu Phe 20 25 Thr Ser Thr Ile Val Leu Lys Glu Gly Glu Gly Asn Glu Asp Glu Ser Val Pro Gly Ala Asn Glu Arg Pro Gln Thr Thr Gly Ala Ser Phe Phe 55 50

Phe Pro Gly Leu Lys Pro His Gly Val Leu Trp Glu Arg Ala Gly Thr

Leu Gly Ala Arg Ser Thr Trp Val Pro Ser Ser Ala Gln Trp Met Thr
85 90 95

Asp Ser Trp Val

<210> 60

<211> 106

<212> PRT

<213> Homo sapiens

<400> 60

Met Val His Ile Ala Ile Lys Thr Pro Leu His Pro Ala Thr Pro Ile 1 5 10

Pro His Arg Ala Phe Val Pro Ala Leu Ala Phe Leu Pro Phe Ser Phe 20 25 30

Ser Ser Pro Leu Ser Ser Leu Lys Ala Val Ser Cys Phe Gln Cys Asp  $35^{\circ}$  40 45

Asn Thr Met Met Ser Phe Gly Arg Ile Cys Gln Asp Arg Leu Ile Leu 50 55 60

Ser Pro Gly Cys Arg Met Cys Met Arg Gln Cys Cys Gln Ala Ile Leu 65 70 75 80

Phe Glu Ala Leu Cys Cys His Asn Tyr His Gln Val His Thr Val Gly 85 90 95

Lys Arg Leu Thr Pro Asp Phe Arg Lys Cys 100 105

<210> 61

<211> 90

<212> PRT

<213> Homo sapiens

<400>.61

Met Leu Val Leu Phe Cys Phe Ile Ser Leu Ile Lys Val Gln Cys Thr
1 5 10 15

Leu Cys His Ser Ser Val Gly Asn Arg Ile Pro Leu Lys Ser Trp Pro
20 25 30

Cys Lys Ile Gln Leu Ser Phe Asn Ile His Ala Phe Val Pro Leu Arg 35 40 . 45

Lys Tyr Phe Leu Ser Phe Phe Val Leu Gln Asn Tyr Asn Val Ile Gln 50 55 60

Gly Val Tyr Arg Leu Val Ile Lys Gly Ser Phe Leu Cys Val Thr Phe
65 70 75 80

Phe Leu Tyr Ser Tyr Ser Ile Phe Lys Gln 85

<210> 62

<211> 148

<212> PRT

<213> Homo sapiens

<400> 62

Met Ser Pro Gly Tyr Thr Phe Lys Thr Ala Leu Ala Val Leu Tyr Leu

1 5 10 15

Val His Met Ile Gln Asn Met Phe Pro Tyr Asn Met Gly Leu Ser Leu 20 25 30

Leu Ala Asn Pro Ala Pro Ser Ser Ser Ser Asn Leu Leu Ser Glu Ala  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Ser Ala Leu His Leu Leu Leu Ala Asp Gly Asn Leu Gln Gly Lys Ala 50 55 60

Glu Gly Phe Leu Gly Lys Pro Gly Lys Pro Val Phe Pro Met Cys Gln 65 70 75 80

Ile Cys Leu Ala Ser Lys Gly Cys Met Gly Phe Leu Ala Ser Phe 85 90 95

Gln Glu Ala Leu Gly Phe Leu Leu Pro Arg Phe Pro Gln Ser Ser 100 105 110

Gln Met Leu Lys Phe Leu Lys Val Asp Val Thr Gly Ser Leu Thr Thr 115 120 125

Asn Lys Leu Ala Val Thr Val Phe Glu Thr Gln Tyr Leu Trp Gln Leu 130 135 140

Thr Ser Asn Gln

<210> 63

<211> 78

<212> PRT

<213> Homo sapiens

<400> 63

Met Met Ile Ala Leu Leu Ile Ser Lys Lys Trp Ser Met Leu Gly Leu
1 5 10 15

Arg Pro Gly Ala Leu Tyr Leu Leu Cys Leu His Leu Phe Leu Gly Asp

Leu Thr Gln Tyr His Ala Val Asn Lys Leu Met Thr Pro Lys Ser Ile 35 40

Tyr Pro Ala Leu Val Pro Leu Trp Ala Pro Leu Asn Ile Ser Ser Pro

50 55 60

Thr Phe Leu Leu Ser Met Lys Ser Thr Gln Met Pro Ser Cys 65 70 75

<210> 64

<211> 41

<212> PRT

<213> Homo sapiens

<400> 64

Met Ala Ile Trp Lys Leu Ile Ser Ile Tyr Phe Met Phe Ala Thr Trp

1 5 10 15

Leu Tyr Ser Ile Ser Pro Lys Leu Lys Asn Asn Leu Pro Gly Leu Gln 20 25 30

Asp Pro Lys Glu Thr Cys Leu Met Glu 35 40

<210> 65

<211> 43

<212> PRT

<213> Homo sapiens

<400> 65

Met Glu His Leu Ile Arg Ser Gly Val Lys Ile Leu Phe Leu Asn Leu

1 10 15

Leu Leu Thr Ser Cys Thr Thr Leu Asn Glu Trp Leu Asn Phe Leu Val

Thr Leu Asn Cys Ser Arg Tyr Lys Met Thr Gly 35

<210> 66

<211> 49

<212> PRT

<213> Homo sapiens

<400> 66

Met Val Asn Leu Thr Val Pro Pro Leu Leu Leu Leu Tyr Val Leu Gly
1 5 10 15

His Gly Lys Pro Lys Glu Cys Leu Arg Cys Ser Ser Gly Leu Ser Lys 20 25 30

Ser Tyr Thr Asp Leu Gly Arg Arg Ser Ala Asp Ser Lys His Ser Leu 35 40 45

Lys

```
<211> 76
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Asn Arg Gly Gln Arg Leu Cys Leu Ala Phe Val Ser Leu Phe Pro
                 5
Pro Cys Asn Ser Leu Xaa Pro Pro Pro Thr Leu Phe Pro Ser Pro Leu
Leu Pro Leu Ser Leu Thr Ser Pro Thr Pro His Ser Leu Ser Ser Leu
        35
Ala Val Ser Cys Val Cys Val Gly Val Cys Val Phe Gly Cys Val Asn
                        55
Val Gly Ser Ser Thr Thr Gly Phe Cys Asn Leu Gly
                    70
<210> 68
<211> 58
<212> PRT
<213> Homo sapiens
Met Pro Arg Asp Ala Ser Leu Ala Arg Arg Ala Cys Leu Ser Leu Leu
                 5
1
                                     10
Leu His Leu Ser Trp Phe Pro Pro Cys Ser Ala Pro Gly Val Ile Phe
                                 25
Ser His Ser Gly Tyr Gln Gly Phe Tyr His Ile Gly Phe Pro Lys Pro
                             40
His Ser Asn Ser Pro Leu Ser Gly Lys Pro
    50
<210> 69
<211> 44
<212> PRT
<213> Homo sapiens
<400> 69
Met Leu Cys Phe Ser Pro Leu Cys Arg Arg Leu Phe Phe Pro Leu Leu
           . 5
Phe Gln Cys Arg Trp Phe Leu Leu Asn Leu Thr Pro Phe Ser Cys Ala
```

<210> 67

Gln Cys Gly Asn Lys Ser Ser Glu Arg Ile His Leu .35 40

<210> 70

<211> 61

<212> PRT

<213> Homo sapiens

<400> 70

Met Gly Gly Leu Trp Asn Val Arg Phe Leu Leu Ile Pro Thr Val Leu

1 5 10 15

Trp Gly Phe His Cys Ser Gln Glu Arg Ala Phe Pró Arg Lys Leu Gln 20 25 30

Val Arg Ser Leu Gln Trp Pro Lys Gly Asp Pro Pro Glu Glu Val Thr

Leu Pro Asn Trp Asp Ile Gly Thr Leu Asp Leu Asn Ile 50 55 60

<210> 71

<211> 42

<212> PRT

<213> Homo sapiens

<400> 71

Met Met Leu Gly Leu Arg Gln Lys Leu Thr Thr Ser Leu Thr Ser Ala

Ala Ala Leu Thr Cys Val Leu Leu Leu Ser Met Thr Gly Met Thr Thr 20 25 30

Ser Ser Ser Arg Ser Val Leu Trp Lys Thr 35

<210> 72

<211> 83

<212> PRT

<213> Homo sapiens

<400> 72

Met Glu Thr Ala Glu Leu Thr Ser Pro Gly Leu Phe Ala Gln Lys Arg

1 5 10 15

Gly Leu Leu Leu Ser Leu Cys Phe Phe Pro Trp Pro Leu Cys Val

Leu Ser Ser Pro Ala His Asp Gln Leu Pro Ser Ala Glu Gly Lys
35 40 45

Leu Leu Lys Val Glu Ile Leu Ser Ser Pro Pro Leu Phe Ser Arg Lys 50 55 60

```
Leu Ser Leu Glu Leu Cys Pro Val Arg His Arg Thr Leu Ala Arg Gly 65 · 70 75 80

Leu Asn Asp
```

<210> 73 <211> 55 <212> PRT

<213> Homo sapiens

<400> 73

Met Ala Val Ile His Tyr Gln Gln Phe Leu Trp Phe Leu Glu Leu Val 1 5 10

Leu Gln Cys Ser Trp Gly Gln Thr Leu Ile Gly Cys Phe Phe Val Val
20 25 30

Leu Arg Gly His Leu Cys Ser Ile Val Arg Thr Gly Lys Arg Met Phe  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Leu Glu His Cys Asp Leu Glu 50 55

<210> 74 <211> 85 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 74

Met Leu His Leu Ile Tyr Tyr Phe Val Val Ile Ile Gln Leu Met Ile 1 5 10

Ala Arg Ala Asp Ile Pro Gln Ile Ala Thr Val Phe Pro Gly Gln Cys 20 25.

Val Lys Ser Val Leu Leu Cys Ile Ile Leu Phe Asn Pro His Ser Tyr 35 40 45

Leu Leu Cys Val Leu Ile Leu Trp Ile Glu Met Leu Arg Val Arg Lys
50 55 60

Val Lys Pro Pro Phe Gln Ser Xaa Ile Ala Ser Tyr Leu Gln Arg Lys 65 70 75 80

Phe Ser Thr Asp Leu

<210> 75

<211> 94

<212> PRT

<213> Homo sapiens

<400> 75

Met His Phe Phe Val Glu Ser Thr Ile Val Ser Asp Thr Leu Ile Thr 1 5 10 15

Leu Ser Asn Leu Thr Phe His Lys Cys Pro Glu Tyr Glu Asn Ile Ile 20 25 30

Gln Asp Leu Asn Thr Asn Tyr Gln Asn Leu Gln Leu Ser Asn Gly Arg 35 40 45

Leu Arg Phe Met Leu Cys His Val Phe Ser Ser Phe Leu Phe Val Met 50 . 55 . 60

Val Phe Gln Ile Val Glu Lys Glu Asn Ile Leu Phe Val Ile Ala Ser 65 70 75 80

Ala Ser Tyr Phe Cys Lys Thr Asn Tyr Ser Asn Ser Val Val

<210> 76

<211> 47

<212> PRT

<213> Homo sapiens

<400> 76

Met Thr Ala Gly Phe Met Gly Met Ala Val Ala Ile Ile Leu Phe Gly
1 5 10 15

Trp Ile Ile Gly Val Leu Gly Cys Cys Trp Asp Arg Gly Leu Met Gln 20 25 30

Tyr Val Ala Gly Cys Ser Ser Ser Trp Glu Gly Lys Gln Trp Asn 35 40 45

<210> 77

<211> 120

<212> PRT

<213> Homo sapiens

<400> 77

Met Arg Pro Val Ser Val Trp Gln Trp Ser Pro Trp Gly Leu Leu 1 5 10 15

Cys Leu Cys Ser Ser Cys Leu Gly Ser Pro Ser Pro Ser Thr Gly
20 25 30

Pro Glu Lys Lys Ala Gly Ser Gln Gly Leu Arg Phe Arg Leu Ala Gly

Phe Pro Arg Lys Pro Tyr Glu Gly Arg Val Glu Ile Gln Arg Ala Gly

50 55 60 Glu Trp Gly Thr Ile Cys Asp Asp Phe Lys Leu Gln Ala Ala Gln 70 75 Ile Leu Cys Arg Glu Leu Gly Phe Thr Glu Pro Gln Leu Asp Pro Gln 90 Cys Gln Ile Trp Pro Trp Asn Ser Arg Ile Trp Leu Asp Asn Leu Ser 105 Cys Met Gly Pro Ser Arg Cys Asp 115 120 <210> 78 <211> 305 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <400> 78 Met Pro Ala Xaa Ala Xaa Ala Ser Phe Pro Phe Phe Leu Phe Ala Leu 10 Phe Val Ile Ala Cys Gly Leu Gly Cys Leu Glu Thr Ala Ala Asn Pro 25 . Tyr Ala Thr Val Leu Gly Glu Pro Gln Gly Ala Glu Arg Arg Leu Asn Leu Ala Gln Ser Phe Asn Gly Leu Gly Gln Phe Phe Gly Pro Leu Ile Gly Gly Ala Met Phe Phe Ser Ala Gly Ser Thr Pro Ala Ser Asp Met Ser Ser Leu Gln Thr Thr Tyr Val Val Ile Ala Val Leu Val Leu Leu 85 Val Ala Leu Leu Ile Ala Arg Thr Pro Leu Pro Asp Leu Arg Ala Gln 105 Glu Gln Ala Leu Gln Pro Thr Ala Gly Lys Gly Leu Trp Gln His Arg

Glu Phe Val Gly Gly Val Ile Thr Gln Phe Phe Tyr Val Ala Ala Gln

135

Val Gly Val Gly Ala Phe Phe Ile Asn Tyr Val Thr Glu His Trp Ala 145 150 155 160

Gln Met Gly Asn Gln Gln Ala Ala Tyr Leu Leu Ser Ile Ala Met Leu 165 170 175

Ala Phe Met Phe Gly Arg Phe Phe Ser Thr Trp Leu Met Gly Arg Val 180 185 190

Ser Ala Gln Lys Leu Leu Leu Ile Tyr Ala Leu Ile Asn Ile Ala Leu 195 200 205

Cys Gly Leu Val Val Ile Gly Leu Glu Gly Ile Ser Val Ile Ala Leu 210 220

Ile Ala Val. Phe Phe Phe Met Ser Ile Met Phe Pro Thr Leu Phe Ala 225 230 235 240

Met Gly Val Lys Asn Leu Gly Pro His Thr Lys Arg Gly Ser Ser Phe 245 250 255

Met Ile Met Ala Ile Val Gly Gly Ala Leu Met Pro Tyr Leu Met Gly 260 265 270

Lys Val Ala Asp Asn Ser Thr Val Ala Leu Ala Tyr Leu Leu Pro Met 275 280 285

Gly Cys Phe Val Ile Val Ala Val Tyr Ala Arg Ser Arg Leu Arg His 290 295 . 300

Pro 305

<210> 79

<211> 184

<212> PRT

<213> Homo sapiens

<400> 79

Gln Phe His Thr Gly Thr Ala Met Thr Met Ile Thr Pro Ser Ser Asn 1 5 10 15

Thr Thr His Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly 20 25 . 30

Ile Pro Gly Ser Thr His Ala Ser Ala Gly Lys Gln Leu Thr Ser Ala 35 . 40 45

Val Leu Arg Ala Ser Arg Pro Pro Leu Pro Ser Leu Pro Ala Arg Met 50 55 60

Ala Ser Cys Leu Ala Leu Arg Met Ala Leu Leu Leu Val Ser Gly Val 65 70 75 80

Leu Ala Pro Ala Val Leu Thr Asp Asp Val Pro Gln Glu Pro Val Pro

85 90 95

Thr Leu Trp Asn Glu Pro Ala Glu Leu Pro Ser Gly Glu Gly Pro Val 100 105 110

Pro Thr Val Ala Pro Gly Pro Glu Asp Ser Thr Ala Gln Glu Arg Leu 130 135 140

Asp Gln Gly Gly Ser Leu Gly Pro Gly Ala Ile Ala Ala Ile Val 145 150 155 160

Ile Ala Ala Leu Leu Ala Thr Cys Val Val Leu Ala Leu Val Val Val 165 170 175

Ala Leu Arg Lys Phe Ser Ala Ser 180

<210> 80

<211> 46

<212> PRT

<213> Homo sapiens

<400> 80

Cys Glu Glu Gln Asp Gly Arg Leu Ala Thr Tyr Ser Gln Leu Tyr Gln

1 10 15

Ala Trp Thr Glu Gly Leu Asp Trp Cys Asn Ala Gly Trp Leu Leu Glu 20 25 30

Gly Ser Val Arg Tyr Pro Val Leu Thr Ala Arg Ala Pro Cys
35 40 45

<210> 81

<211> 47

<212> PRT

<213> Homo sapiens

<400> 81

Cys Arg Arg Gly Ala Val Val Ala Lys Val Gly His Leu Tyr Ala 1 5 10 15

Ala Trp Lys Phe Ser Gly Leu Asp Gln Cys Asp Gly Gly Trp Leu Ala 20 25 30

Asp Gly Ser Val Arg Phe Pro Ile Thr Thr Pro Arg Pro Arg Cys 35 40 45

<210> 82

<211> 47

<212> PRT

<213> Homo sapiens

Met Thr Ala Gly Phe Met Gly Met Ala Val Ala Ile Ile Leu Phe Gly

Trp Ile Ile Gly Val Leu Gly Cys Cys Trp Asp Arg Gly Leu Met Gln 25

Tyr Val Ala Gly Cys Ser Ser Ser Trp Glu Gly Lys Gln Trp Asn

<210> 83

<211> 120

<212> PRT

<213> Homo sapiens

Met Arg Pro Val Ser Val Trp Gln Trp Ser Pro Trp Gly Leu Leu

Cys Leu Leu Cys Ser Ser Cys Leu Gly Ser Pro Ser Pro Ser Thr Gly 25

Pro Glu Lys Lys Ala Gly Ser Gln Gly Leu Arg Phe Arg Leu Ala Gly

Phe Pro Arg Lys Pro Tyr Glu Gly Arg Val Glu Ile Gln Arg Ala Gly

Glu Trp Gly Thr Ile Cys Asp Asp Phe Lys Leu Gln Ala Ala Gln 70

Ile Leu Cys Arg Glu Leu Gly Phe Thr Glu Pro Gln Leu Asp Pro Gln 90

Cys Gln Ile Trp Pro Trp Asn Ser Arg Ile Trp Leu Asp Asn Leu Ser 100

Cys Met Gly Pro Ser Arg Cys Asp

<210> 84

<211> 38

<212> PRT

<213> Homo sapiens

Gly Ala His Pro Gly Glu Gly Arg Val Glu Val Leu Lys Ala Ser Thr

Trp Gly Thr Val Cys Asp Arg Lys Trp Asp Leu His Ala Ala Ser Val . 25

Val Cys Arg Glu Leu Gly

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<210> 85
<211> 323
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 85
Met Asp Arg His Gly Leu Gln Gly Arg Asp Pro Ala Gly Pro Val Pro
Val Cys Gly Gly Arg Ala Ala Val His Ala Gly Xaa Gly Xaa Gly Glu
Leu Ser Val Phe Pro Val Arg Ala Val Cys His Arg Leu Arg Pro Gly
Leu Pro Gly Asp Arg Cys Gln Pro Leu Cys His Gly Ala Gly Gly Thr
                         55
Pro Gly Arg Arg Ala Ala Val Glu Pro Gly Ala Ile Ile Gln Trp Pro
                     70
Trp Pro Val Leu Arg Pro Ala Asp Trp Arg Arg Asp Val Leu Gln Arg
                                     90
Arg Gln His Thr Gly Leu Gly His Glu Phe Val Ala Asp His Leu Arg
            100
                              105
Gly Asp Arg Xaa Ser Gly Thr Ala Gly Gly Ala Ala Asp Arg Pro His
Ala Ala Ala Gly Phe Ala Arg Pro Gly Thr Gly Thr Ala Thr Asp Gly
Arg Gln Arg Ser Val Ala Ala Pro Gly Val Cys Arg Trp Xaa Asp His
                    150
                                        155
```

Ala Val Phe Leu Cys Gly Gly Pro Gly Arg Ser Arg Arg Ile Phe His 165 170 175

Gln Leu Arg His Arg Ala Leu Gly Thr Asp Gly Gln Ser Ala Ser Arg 180 . 185 190

Leu Ser Ala Val Asp Arg Asn Ala Gly Leu His Val Arg Ala Leu Phe 195 200 . 205

Gln Tyr Leu Ala Asp Gly Pro Gly Gln Arg Ala Glu Ala Ala Ala Asp 210 215 220

Leu Cys Ala Asp Gln Tyr Arg Val Val Arg Pro Gly Gly Asp Arg Pro 225 230 235 240

Gly Arg Tyr Leu Ser Asp Arg Ala Asp Arg Ser Val Leu Leu His Val 245 250 255

Asp His Val Pro Asp Ala Val Arg His Gly Arg Glu Glu Pro Arg Ala 260 265 270

Ala His Gln Ala Arg Gln Phe Val His Asp His Gly Asp Arg Arg Arg 275 280 285

Arg Pro Asp Ala Leu Leu Asp Gly Gln Gly Gly Gln Gln His Gly 290 295 300

Gly Ala Gly Leu Pro Val Ala Tyr Gly Val Phe Arg Asp Cys Gly Gly 305 310 315 320

Val Cys Pro

<210> 86

<211> 35

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids'

<400> 86

Met Asp Arg His Gly Leu Gln Gly Arg Asp Pro Ala Gly Pro Val Pro 1 5 10 15

Val Cys Gly Gly Arg Ala Ala Val His Ala Gly Xaa Gly Xaa Gly Glu 20 25 30

```
Leu Ser Val
<210> 87
<211> 36
 <212> PRT
 <213> Homo sapiens
 Phe Pro Val Arg Ala Val Cys His Arg Leu Arg Pro Gly Leu Pro Gly
                                     10
Asp Arg Cys Gln Pro Leu Cys His Gly Ala Gly Gly Thr Pro Gly Arg
             20
 Arg Ala Ala Val
         35
<210> 88
 <211> 41
 <212> PRT
 <213> Homo sapiens
 <400> 88
Glu Pro Gly Ala Ile Ile Gln Trp Pro Trp Pro Val Leu Arg Pro Ala
              5 .
                                 10
Asp Trp Arg Arg Asp Val Leu Gln Arg Arg Gln His Thr Gly Leu Gly
 His Glu Phe Val Ala Asp His Leu Arg
 <210> 89
 <211> 35
<212> PRT
<213> Homo sapiens
. <220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 89
Gly Asp Arg Xaa Ser Gly Thr Ala Gly Gly Ala Ala Asp Arg Pro His
                5
Ala Ala Ala Gly Phe Ala Arg Pro Gly Thr Gly Thr Ala Thr Asp Gly
Arg Gln Arg
```

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<210> 90
<211> 35
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 90
Ser Val Ala Ala Pro Gly Val Cys Arg Trp Xaa Asp His Ala Val Phe
Leu Cys Gly Gly Pro Gly Arg Ser Arg Arg Ile Phe His Gln Leu Arg
                                25
His Arg Ala
         35
<210> 91
<211> 36
<212> PRT
<213> Homo sapiens
<400> 91
Leu Gly Thr Asp Gly Gln Ser Ala Ser Arg Leu Ser Ala Val Asp Arg
 1
Asn Ala Gly Leu His Val Arg Ala Leu Phe Gln Tyr Leu Ala Asp Gly
             20
Pro Gly Gln Arg
  . 35
<210> 92
<211> 34
<212> PRT
<213> Homo sapiens
<400> 92
Ala Glu Ala Ala Ala Asp Leu Cys Ala Asp Gln Tyr Arg Val Val Arg
                                    10
 Pro Gly Gly Asp Arg Pro Gly Arg Tyr Leu Ser Asp Arg Ala Asp Arg
             20
Ser Val
 <210> 93
```

<211> 37 <212> PRT

<213> Homo sapiens

```
<400> 93
Leu Leu His Val Asp His Val Pro Asp Ala Val Arg His Gly Arg Glu
                                    10
Glu Pro Arg Ala Ala His Gln Ala Arg Gln Phe Val His Asp His Gly
            20
                               25
Asp Arg Arg Arg Arg
       35
<210> 94
<211> 34
<212> PRT
<213> Homo sapiens
Pro Asp Ala Leu Leu Asp Gly Gln Gly Gly Gln Gln His Gly Gly
                                     10
Ala Gly Leu Pro Val Ala Tyr Gly Val Phe Arg Asp Cys Gly Gly Val
            20
                                 25
Cys Pro
<210> 95
<211> 305
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Pro Ala Xaa Ala Xaa Ala Ser Phe Pro Phe Phe Leu Phe Ala Leu
                                    10
Phe Val Ile Ala Cys Gly Leu Gly Cys Leu Glu Thr Ala Ala Asn Pro
                                25
Tyr Ala Thr Val Leu Gly Glu Pro Gln Gly Ala Glu Arg Arg Leu Asn
        35
Leu Ala Gln Ser Phe Asn Gly Leu Gly Gln Phe Phe Gly Pro Leu Ile
```

Gly Gly Ala Met Phe Phe Ser Ala Gly Ser Thr Pro Ala Ser Asp Met

00					70					, ,					00
Ser	Ser	Leu	Gln	Thr 85	Thr	Tyr	Val	Val	Ile 90	Ala	Val	Leu	Val	Leu 95	Leu
Val	Ala	Leu	Leu 100	Ile	Ala	Arg	Thr	Pro 105	Leu	Pro	qzA	Leu	Arg 110	Ala	Gln
Glu	Gln	Ala 115	Leu	Gln	Pro	Thr	Ala 120	Gly	Lys	Gly	Leu	Trp 125	Gln	His	Arg
Glu	Phe 130	Val	Gly	Gly	Val	Ile 135	Thr	Gln	Phe	Phe	Tyr 140	Val	Ala	Ala	Gln
Val 145	Gly	Val	Gly	Ala	Phe 150	Phe	Ile	Asn	Tyr	Val 155	Thr	Glu	His	Trp	Ala 160
Gln	Met	Gly	Asn	Gln 165	Gln	Ala	Ala	Tyr	Leu 170	Leu	Ser	Ile	Ala	Met 175	Leu
Ala	Phe	Met	Phe 180	Gly	Arg	Phe	Phe	Ser 185	Thr	Trp	Leu	Met	Gly 190	Arg	Val
Ser	Ala	Gln 195	Lys	Leu	Leu	Leu	Ile 200	Tyr	Ala	Leu	Ile	Asn 205	Ile	Ala	Leu
Cys	Gly 210	Leu	Val	Val	Ile	Gly 215	Leu	Glu	Gly	Ile	Ser 220	Val	Ile	Ala	Leu
Ile 225	Ala	Val	Phe	Phe	Phe 230	Met	Ser	Ile	Met	Phe 235	Pro	Thr	Leu	Phe	Ala 240
Met	Gly	Val	Lys	Asn 245	Leu	Gly	Pro	His	Thr 250	Lys	Arg	Gly	Ser	Ser 255	Phe
Met	Ile	Met	Ala 260		Val	Gly	Gly	Ala 265	Leu	Met	Pro	Tyr	Leu 270	Met	Gly
		275					280					285			Met
Gly	Суs 290		Val	Ile	Val	Ala 295		Tyr	Ala	Arg	Ser 300		Leu	Arg	His
Pro 305															
<210> 96 <211> 88 <212> PRT															
<21	3> H	Omo	sapi	ens											
	0> 9 Thr		Glu	Gly 5		Gln	Lys	Asp	Pro		His	Asp	Leu	Phe	Ala

Leu Ala Ser Leu Pro Asn Pro Arg Trp Leu Thr Arg Gln Ser Gln Met
20 25 30

Leu Thr Ser His Gln Pro Thr Ser Leu Ile His Ile Leu Leu Val Ser 35 40 45

Leu Phe Leu Ser Asn Pro Leu Cys Phe Gly Leu Leu Ser Val Cys Pro 50 55 60 .

Leu Gln Asn Ser Tyr Val Glu Ala Leu Thr Pro Asn Met Thr Leu Phe 65 70 75 80

Gly Asp Glu Ala Leu Ile Ile

<210> 97

<211> 120

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 97

Lys Asn Trp Asp Phe Pro Pro Pro Arg Pro Thr Gln Ile Asn Tyr Ile 1 5 10 15

Tyr Thr Val Ser Ser Ser Leu Thr Arg Ser Phe Trp Ala Leu His 20 25 30

Phe Leu Leu Val Cys Val Gln Lys Leu Gln Val Asp Met Asn Arg Gly 35 40 45

Gln Arg Leu Cys Leu Ala Phe Val Ser Leu Phe Pro Pro Cys Asn Ser 50 60

Leu Xaa Pro Pro Pro Thr Leu Phe Pro Ser Pro Leu Leu Pro Leu Ser 65 70 75 80

Leu Thr Ser Pro Thr Pro His Ser Leu Ser Ser Leu Ala Val Ser Cys
85 90 95

Val Cys Val Gly Val Cys Val Phe Gly Cys Val Asn Val Gly Ser Ser 100 105 110

Thr Thr Gly Phe Cys Asn Leu Gly 115 120

<210> 98

<211> 370

<212> PRT

<213> Homo sapiens

<400> 98

- Met Pro Phe Thr Asn Pro Ala Arg Lys Asp Gly Ala Met Phe Phe His 1 . 5 10 15
- Trp Arg Arg Ala Ala Glu Glu Gly Lys Asp Tyr Pro Ser Ala Arg Phe
  20 25 30
- Asn Lys Thr Val Gln Val Pro Val Tyr Ser Glu Gln Glu Tyr Gln Leu 35 40 45
- Tyr Leu His Asp Asp Ala Trp Thr Lys Ala Glu Thr Asp His Leu Phe 50 60
- Asp Leu Ser Arg Arg Phe Asp Leu Arg Phe Val Val Ile His Asp Arg 65 70 75 80
- Tyr Asp His Gln Gln Phe Lys Lys Arg Ser Val Glu Asp Leu Lys Glu 85 90 95
- Arg Tyr Tyr His Ile Cys Ala Lys Leu Ala Asn Val Arg Ala Val Pro 100 105 110
- Gly Thr Asp Leu Lys Ile Pro Val Phe Asp Ala Gly His Glu Arg Arg
  115 120 125
- Arg Lys Glu Gln Leu Glu Arg Leu Tyr Asn Arg Thr Pro Glu Gln Val 130  $$135\$
- Ala Glu Glu Tyr Leu Leu Gln Glu Leu Arg Lys Ile Glu Ala Arg
  145 150 155 . 160
- Lys Lys Glu Arg Glu Lys Arg Ser Gln Asp Leu Gln Lys Leu Ile Thr 165 170 175
- Ala Ala Asp Thr Thr Ala Glu Gln Arg Arg Thr Glu Arg Lys Ala Pro 180 - 185 190
- Lys Lys Leu Pro Gln Lys Lys Glu Ala Glu Lys Pro Ala Val Pro 195 200 205
- Glu Thr Ala Gly Ile Lys Phe Pro Asp Phe Lys Ser Ala Gly Val Thr 210 215 220
- Leu Arg Ser Gln Arg Met Lys Leu Pro Ser Ser Val Gly Gln Lys Lys 225 230 235 240
- Ile Lys Ala Leu Glu Gln Met Leu Leu Glu Leu Gly Val Glu Leu Ser 245 250 255
- Pro Thr Pro Thr Glu Glu Leu Val His Met Phe Asn Glu Leu Arg Ser 260 265 270
- Asp Leu Val Leu Leu Tyr Glu Leu Lys Gln Ala Cys Ala Asn Cys Glu 275 280 285
- Tyr Glu Leu Gln Met Leu Arg His Arg His Glu Ala Leu Ala Arg Ala 290 295 300

```
Gly Val Leu Gly Gly Pro Ala Thr Pro Ala Ser Gly Pro Gly Pro Ala
                                       315
Ser Ala Glu Pro Ala Val Thr Glu Pro Gly Leu Gly Pro Asp Pro Lys
                       3.30
Asp Thr Ile Ile Asp Val Val Gly Ala Pro Leu Thr Pro Asn Ser Arg.
                              345
Lys Arg Arg Glu Ser Ala Ser Ser Ser Ser Val Lys Lys Ala Lys
                          360
                                               365
Lys Pro
    370
<210> 99
<211> 39
<212> PRT
<213> Homo sapiens
Met Pro Phe Thr Asn Pro Ala Arg Lys Asp Gly Ala Met Phe Phe His
 1
Trp Arg Arg Ala Ala Glu Glu Gly Lys Asp Tyr Pro Ser Ala Arg Phe
                                25
Asn Lys Thr Val Gln Val Pro
        35
<210> 100
<211> 41
<212> PRT
<213> Homo sapiens
<400> 100
Val Tyr Ser Glu Gln Glu Tyr Gln Leu Tyr Leu His Asp Asp Ala Trp
                       10
Thr Lys Ala Glu Thr Asp His Leu Phe Asp Leu Ser Arg Arg Phe Asp
Leu Arg Phe Val Val Ile His Asp Arg
        35
<210> 101
<211> 42
<212> PRT
<213> Homo sapiens
<400> 101
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Tyr Asp His Gln Gln Phe Lys Lys Arg Ser Val Glu Asp Leu Lys Glu.
1 5 10 15

Arg Tyr Tyr His Ile Cys Ala Lys Leu Ala Asn Val Arg Ala Val Pro
20 25 30

Gly Thr Asp Leu Lys Ile Pro Val Phe Asp 35

<210> 102

<211> 43

<212> PRT

<213> Homo sapiens

<400> 102

Ala Gly His Glu Arg Arg Lys Glu Gln Leu Glu Arg Leu Tyr Asn 1 5 10

Arg Thr Pro Glu Gln Val Ala Glu Glu Glu Tyr Leu Leu Gln Glu Leu
20 . 25 30

Arg Lys Ile Glu Ala Arg Lys Lys Glu Arg Glu

<210> 103

<211> 41

<212> PRT

<213> Homo sapiens

<400> 103

Lys Arg Ser Gln Asp Leu Gln Lys Leu Ile Thr Ala Ala Asp Thr Thr 1 5 10 15

Ala Glu Gln Arg Arg Thr Glu Arg Lys Ala Pro Lys Lys Leu Pro
20 25 30

Gln Lys Lys Glu Ala Glu Lys Pro Ala 35

<210> 104

<211> 42

<212> PRT

<213> Homo sapiens

<400> 104

Val Pro Glu Thr Ala Gly Ile Lys Phe Pro Asp Phe Lys Ser Ala Gly
1. 5 10 15

Val Thr Leu Arg Ser Gln Arg Met Lys Leu Pro Ser Ser Val Gly Gln 20 25 30

Lys Lys Ile Lys Ala Leu Glu Gln Met Leu . 35 40

<210> 105

```
<211> 43
<212> PRT
<213> Homo sapiens
<400> 105
Leu Glu Leu Gly Val Glu Leu Ser Pro Thr Pro Thr Glu Glu Leu Val
                 5
                                    10
His Met Phe Asn Glu Leu Arg Ser Asp Leu Val Leu Leu Tyr Glu Leu
                                25
Lys Gln Ala Cys Ala Asn Cys Glu Tyr Glu Leu
<210> 106
<211> 40
<212> PRT
<213> Homo sapiens
<400> 106
Gln Met Leu Arg His Arg His Glu Ala Leu Ala Arg Ala Gly Val Leu
                                     10
                  5
Gly Gly Pro Ala Thr Pro Ala Ser Gly Pro Gly Pro Ala Ser Ala Glu
                                 25
Pro Ala Val Thr Glu Pro Gly Leu
         35
<210> 107
<211> 39
<212> PRT
<213> Homo sapiens
Gly Pro Asp Pro Lys Asp Thr Ile Ile Asp Val Val Gly Ala Pro Leu
Thr Pro Asn Ser Arg Lys Arg Arg Glu Ser Ala Ser Ser Ser Ser
                                 25
             20
Val Lys Lys Ala Lys Lys Pro
        35
<210> 108
<211> 112
<212> PRT
<213> Homo sapiens
<400> 108
Ala Pro Arg Ser Ala Thr Arg Ile Val Leu Met Lys Ala Leu Leu Gly
```

10

Leu Phe Asp Arg Ala Gln His Pro Met Ser Pro His Leu Met Glu Thr

14.40

25 30 Ala Glu Leu Thr Ser Pro Gly Leu Phe Ala Gln Lys Arg Gly Leu Leu 40 45 Leu Leu Ser Leu Cys Phe Phe Pro Trp Pro Leu Cys Val Leu Ser Ser Ser Pro Ala His Asp Gln Leu Pro Ser Ala Glu Gly Lys Leu Leu Lys 70 Val Glu Ile Leu Ser Ser Pro Pro Leu Phe Ser Arg Lys Leu Ser Leu 90 Glu Leu Cys Pro Val Arg His Arg Thr Leu Ala Arg Gly Leu Asn Asp 105 <210> 109 <211> 235 <212> PRT <213> Homo sapiens <400> 109 Met Phe Phe Cys Cys Phe Ala Gly Thr Phe Met Phe Tyr Cys Ala His Trp Gln Thr Tyr Val Ser Gly Thr Leu Arg Phe Gly Ile Ile Asp Val 25 Thr Glu Val Gln Ile Phe Ile Ile Ile Met His Leu Leu Ala Val Ile Gly Gly Pro Pro Phe Trp Gln Ser Met Ile Pro Val Leu Asn Ile Gln Met Lys Ile Phe Pro Ala Leu Cys Thr Val Ala Gly Thr Ile Phe Ser Cys Thr Asn Tyr Phe Arg Val Ile Phe Thr Gly Gly Val Gly Lys Asn Gly Ser Thr Ile Ala Gly Thr Ser Val Leu Ser Pro Phe Leu His Ile 105 Gly Ser Val Ile Thr Leu Ala Ala Met Ile Tyr Lys Lys Ser Ala Val 115 120 Gln Leu Phe Glu Lys His Pro Cys Leu Tyr Ile Leu Thr Phe Gly Phe 135

Val Ser Ala Lys Ile Thr Asn Lys Leu Val Val Ala His Met Thr Lys

150

145

155

Ser Glu Met His Leu His Asp Thr Ala Phe Ile Gly Pro Ala Leu Leu 165 170 175

Phe Leu Asp Gln Tyr Phe Asn Ser Phe Ile Asp Glu Tyr Ile Val Leu 180 185 190

Trp Ile Ala Leu Val Phe Ser Phe Phe Asp Leu Ile Arg Tyr Cys Val 195 200 205

Ser Val Cys Asn Gln Ile Ala Ser His Leu His Ile His Val Phe Arg 210 215 220

Ile Lys Val Ser Thr Ala His Ser Asn His His 225 230 235

<210> 110 . .

<211> 36

<212> PRT

<213> Homo sapiens

<400> 110

Met Phe Phe Cys Cys Phe Ala Gly Thr Phe Met Phe Tyr Cys Ala His 1 5 10 15

Trp Gln Thr Tyr Val Ser Gly Thr Leu Arg Phe Gly Ile Ile Asp Val
20 25 30

Thr Glu Val Gln 35

<210> 111

<211> 38

<212> PRT

<213> Homo sapiens

<400> 111

Ile Phe Ile Ile Ile Met His Leu Leu Ala Val Ile Gly Gly Pro Pro 1 5 10 15

Phe Trp Gln Ser Met Ile Pro Val Leu Asn Ile Gln Met Lys Ile Phe 20 25 30

Pro Ala Leu Cys Thr Val

<210> 112

<211> 38

<212> PRT

<213> Homo sapiens

<400> 112

```
Gly Gly Val Gly Lys Asn Gly Ser Thr Ile Ala Gly Thr Ser Val Leu 20 25 30
```

Ser Pro Phe Leu His Ile 35

<210> 113

<211> 38

<212> PRT

<213> Homo sapiens

<400> 113

Gly Ser Val Ile Thr Leu Ala Ala Met Ile Tyr Lys Lys Ser Ala Val 1 5 10 15

Gln Leu Phe Glu Lys His Pro Cys Leu Tyr Ile Leu Thr Phe Gly Phe  $2.0 \hspace{1cm} 25 \hspace{1cm} 30$ 

Val Ser Ala Lys Ile Thr 35 -

<210> 114

<211> 37

<212> PRT

<213> Homo sapiens

<400> 114

Asn Lys Leu Val Val Ala His Met Thr Lys Ser Glu Met His Leu His 1 5 10 15

Asp Thr Ala Phe Ile Gly Pro Ala Leu Leu Phe Leu Asp Gln Tyr Phe 20 25 30

Asn Ser Phe Ile Asp 35

<210> 115

<211> 48

<212> PRT

<213> Homo sapiens

<400> 115

Glu Tyr Ile Val Leu Trp Ile Ala Leu Val Phe Ser Phe Phe Asp Leu

1 5 10 15

Ile Arg Tyr Cys Val Ser Val Cys Asn Gln Ile Ala Ser His Leu His 20 25 30

Ile His Val Phe Arg Ile Lys Val Ser Thr Ala His Ser Asn His His 35 40 45